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# Korea, Republic of Oilseeds and Products PS&D Update 2006

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## **Report Highlights:**

Total U.S. soybean exports to Korea fell 38 percent by volume from a year earlier. The drop in total imports combined with greater competition from Brazil resulted in reduced imports from the United States as well as a significant decline in U.S. market share. U.S. soybean meal exports to Korea are expected to reach 100,000 tons in 2006/07 based on buying contracts to date. Feed millers are beginning to recognize the value of U.S. dehulled soybean meal in rations for swine, poultry and aquaculture.

Includes PSD Changes: Yes Includes Trade Matrix: Yes Unscheduled Report Seoul [KS1] [KS]

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#### **SECTION I. SUMMARY**

#### **SOYBEANS**

Last year's bumper crop reduced farm gate prices and as a result, Korea's soybean area planted in 2006 decreased to 90,248 hectares, down 15,173 hectares from the previous year. Domestic production is used primarily for traditional food use, whereas imported soybeans are used for crushing (about 75 percent) and for food processing (about 25 percent). The demand for soybeans for food processing has been stable.

In MY 2005/06, soybean imports declined four percent from a year earlier to 1.2 million metric tons (mmt), due to continuing narrow crushing margins. At the same time that local crushers are suffering from worsening crushing margins, the decline in soybean meal and oil prices make it difficult for domestically manufactured soybean oil to compete with imported products, especially those from South America.

Total U.S. soybean exports to Korea fell by 38 percent by volume from a year earlier. The drop in total imports combined with greater competition from Brazil resulted in reduced imports from the United States as well as a significant decline in U.S. market share. The U.S. market share declined to 43 percent, down 24 percent from the previous year while Brazil's market share increased to 52 percent, up 85 percent from the previous year. China has remained relatively stable at 5 percent. Brazilian soybeans dominated the Korean crushing market this year as Korean crushers regard them to have higher oil and protein content for a lower price.

Chinese soybeans, which are imported strictly by private sector buyers, are purchased at the out-of-quota import tariff rate of 487 percent or Korean Won 956/kg, whichever is greater. Seventy percent of the soybeans imported from China were used for sprouting, twenty percent for soybean curd, and the remaining ten percent for soybean-based seasonings.

Samyang Fat and Oil Company merged with CJ Corporation last year and closed its crushing facility in April 2006. As a result, the total soybean crushing capacity in Korea declined to 3,050 metric tons per day (based on 24 hours of processing for 330 days), down 18 percent from the previous year.

#### **MEAL**

Local crushers would like to maintain the amount crushed at 900,000 tons. As a result, production of soybean meal in MY 2006/07 is expected to be 713,000 tons, a three percent increase from the previous year. In contrast, imports are expected to continue to expand due to the greater demand for dehulled soybean meal from local feed millers and the increased interest in aquaculture. Accordingly, soybean meal consumption is expected to increase to 2.5 mmt in MY 2006/07.

In MY 2006/07, Korea is forecast to import 1.8 million tons of soybean meal for feed purposes, a 50,000-ton increase from the previous year, due to an estimated marginal growth in animal inventories. Compound feed production in MY 2006/07 is projected to increase slightly in response to the improved inventories of both cattle and swine. Poultry numbers, however, are expected to remain stable or decrease as a result of the recent outbreak of high path avian influenza in Korea. In addition, given the low soybean meal-inclusion rate in animal rations relative to the levels animal nutritionists generally recommend, feed demand for soybean meal probably has room for additional growth.

The market is dominated by South American and Indian soybean meal; however, U.S. soybean meal exports to Korea are expected to reach 100,000 mt in 2006/07 based on the buying contracts to date. Feed millers are beginning to recognize the value of U.S. dehulled soybean meal in rations for swine, poultry and aquaculture. Continued dehulled soybean meal market development will encourage feed millers to opt for U.S. soybean meal when U.S. prices are attractive vis-à-vis South American meals.

#### **New Demand of Soybean Meal from Marine Aquaculture**

Despite depleting resources of fishery products, Korean seafood production increased to 2.71 million tons in 2005, up 8 percent from the previous year due to the increase of offshore (shallow sea) aquaculture. Offshore aquaculture has increased in the area of seaweed and fish production in recent years to meet the greater demand for fishery products. (For more information about the Korean seafood market, please refer to KS 6114.)

The Korean government has encouraged fish farmers to use extruded pellets (EP), composed of soybean meal, fishmeal and wheat flour, they reduce the levels of pollution from trash fish. Major feed millers who have produced EP expect soybean meal consumption to increase to meet the greater demand from marine aquaculture in the future. They expect the EP inclusion rate of fish feed to be more than 50 percent from the current 15 percent by 2010 under the government's incentive program to protect the environment.

The Noah Offshore Farm Co. Ltd has established six pilot cages of offshore aquaculture in the sea four kilometers away from the city of Pyosun on Jeju Island. This sea station project has been provided technical expertise from Net Systems Company, a U.S. consulting company, and the National Oceanic Atmospheric Administration since September 2004. The pilot offshore aquaculture project has been very successful in growing flounder (pompano) and rockfish by feeding the compound feedstuff made from soy protein concentrate (SPC). SPC is more price competitive and environmentally friendly for the water environment than fish-based feed materials.

In view of the decreasing trend in local fish production, marine aquaculture is expected to meet a greater demand for fishery products by a growing number of health conscious consumers.

#### **New LMO Labeling Requirements for Animal Feed**

The Korean government plans to require LMO labeling for retail packaged animal feed manufactured with LMO oilseeds and grains. This new requirement is expected to be included in a revised edition of the government 'Feed Manual'. The revision aims to protect the biodiversity from environmental release of LMOs.

OIL

In MY 2006/07, oil production is expected to remain stable at 164,000 mt. Total soybean oil consumption is expected to increase to 540,000 mt, up 13 percent from the previous year, to meet the new demand created by the production of bio-diesel. Soybean oil consumption for food will be stable at around 420,000 mt.

The Korean government reached an agreement with five major local petroleum refineries to voluntarily supply 180,000 kiloliters of bio-diesel through their gas stations across the nation for two years from July 2006 to June 2008. Annual production of bio-diesel is around 90,000

kiloliters and it is expected to require the same amount of vegetable oils. Accordingly, in MY 2006/07, Korea is expected to import an additional 60,000 tons of soybean oil. Currently registered bio-diesel plants with a total annual capacity of 307,000 tons plan to continue using soybean oil as raw material. Prior to July 2006, they had mainly used recycled soybean oil for the production of bio-diesel. (For more information on the Korean biodiesel market, please refer to KS6060.)

Soybean oil imported from South America is extremely competitive with domestically produced soybean oil derived from imported soybeans. Food processors that use soybean oil as an input and restaurants have come to rely heavily on the lower priced imported soybean oil.

In MY 2005/06, the importation of soybean oil increased to 264,838 tons, up 9 percent from a year earlier, to make up for the short supply of domestically produced soybean oil and to meet the greater demand from the processed oil industry, the wholesale market and the retail market. Prices for imports were well below those of domestically produced soybean oil.

In MY 2005/06, U.S. soybean oil exports to Korea were 14,201 tons, similar to the previous marketing year. Most U.S. soybean oil was imported during June – July 2006 in which an international supplier who sold Argentine soybean oil failed to secure soybean oil to perform the contract.

#### **Antidumping Petition on Imported Soybean Oil**

On August 28, 2006, the Korean Soybean Processors Association (KSPA) filed an antidumping petition on soybean oil imported from the United States, Argentina and Brazil with the Korea Trade Commission (KTC). The antidumping rate filed by KPSA was 40 percent for Brazilian soybean oil, 26 percent for Argentine soybean oil, and 20 percent for U.S. soybean oil. This is the first antidumping (AD) case that has been brought against a U.S. agricultural product. (For more information about this petition, please refer to KS6099.)

On October 23, 2006, KTC officially announced the beginning of the AD investigation against soybean oil with the antidumping rate adjusted to 34.5 percent for Brazil, 23.7 for Argentina and 17.2 percent for USA. On November 8, 2006, KTC sent out a questionnaire to eight suppliers of soybean oil in three exporting countries to make a preliminary determination within three months. Reply for questionnaires should be submitted no later than December 21, 2006.

Once a preliminary determination is made around sometime between January and March 2007, KTC will conduct an on-site visit of the producers and exporters to check the accuracy of the information they submitted in the questionnaire. This is expected to take one and half to two months.

The final determination will be made after a comment period (usually for one month) and public hearings will take place sometime in 2007.

(1000 HA)(1000 MT)

#### SECTION II. STATISTICAL TABLES OF OILSEED

## Soybean, Oilseed PS&D

# **PSD Table**

Country Korea, Republic of Commodity Oilseed, Soybean

	2004	Revised		2005	Estimate		2006	Forecast	UOM
			Post			Post			Post
	USDA	Post	Estimate	USDA	Post	Estimate	USDA	Post	Estimate
	Official	Estimate	New	Official	Estimate	New	Official	Estimate	New
Market Year Begin		10-2004	10-2004		10-2005	10-2005		10-2006	10-2006 MM/YYYY
Area Planted	80	85	85	0	105	105	0	100	90 (1000 HA)
Area Harvested	85	85	85	105	105	105	100	100	90 (1000 HA)
Beginning Stocks	118	119	119	120	120	120	110	160	125 (1000 MT)
Production	139	139	139	183	183	183	150	150	156 (1000 MT)
MY Imports	1240	1240	1240	1190	1300	1190	1275	1300	1200 (1000 MT)
MY Imp. from U.S.	0	827	827	0	800	514	0	800	500 (1000 MT)
MY Imp. from EU	0	0	0	0	0	0	0	0	0 (1000 MT)
Total Supply	1497	1498	1498	1493	1603	1493	1535	1610	1481 (1000 MT)
MY Exports	0	0	0	0	0	0	0	0	0 (1000 MT)
MY Exp. to EU	0	0	0	0	0	0	0	0	0 (1000 MT)
Crush	975	975	975	960	1000	875	990	1000	900 (1000 MT)
Food Use Dom. Cons.	360	360	360	380	400	450	390	420	430 (1000 MT)
Feed Waste Dom. Co.	42	43	43	43	43	43	45	43	43 (1000 MT)
Total Dom. Cons.	1377	1378	1378	1383	1443	1368	1425	1463	1373 (1000 MT)
Ending Stocks	120	120	120	110	160	125	110	147	108 (1000 MT)
Total Distribution	1497	1498	1498	1493	1603	1493	1535	1610	1481 (1000 MT)
CY Imports	0	1330	1330	0	1300	1200	0	0	1200 (1000 MT)
CY Imp. from U.S.	0	791	791	0	800	500	0	0	500 (1000 MT)
CY Exports	0	0	0	0	0	0	0	0	0 (1000 MT)
CY Exp. to U.S.	0	0	0	0	0	0	0	0	0 (1000 MT)

# **Soybean Import Trade Matrix**

# **Import Trade Matrix**

**Country** Korea, Republic of **Commodit** Oilseed. Soybean

Commodit	Commodit Chacca, Coybean								
Time Period	Oct/Sep	Units:	1,000 MT						
Imports for:	2004		2005						
U.S.	827	U.S.	514						
Others		Others							
Brazil	343	Brazil	620						
China	69	China	56						
Total for Others	440		670						
Total for Others		•	676						
Others not Liste			0						
Grand Total	1240		1190						

Source: Korea Customs Service (KCS)

Korea: Soybean Production							
Crop Year	Area (HA)	Yield (KG/HA)	Production (mt)				
1985	155,964	1,500	233,863				
1990	152,265	1,529	232,786				
1995	105,035	1,520	159,640				
1999	87,026	1,334	116,120				
2000	86,176	1,314	113,196				
2001	78,415	1,501	117,723				
2002	80,804	1,423	115,024				
2003	80,447	1,306	105,089				
2004	85,270	1,625	138,570				
2005	105,421	1,739	183,338				
2006	90,248	1,733	156,404				

Source: Ministry of Agriculture and Forestry

Korea: Soybean Consumption for Crushing (Metric Ton)						
	,	,	10/ 05/0/			
Month	MY 03/04	MY 04/05	MY 05/06			
October	97,863	69,135	66,300			
November	115,975	87,037	73,100			
December	117,442	75,014	65,700			
January	84,334	76,609	64,500			
February	98,243	83,257	57,500			
March	100,503	83,880	83,300			
April	93,969	82,606	78,400			
May	75,925	89,274	78,000			
June	78,691	79,455	81,300			
July	84,006	83,000	84,600			
August	75,157	89,400	79,500			
September	66,811	76,700	92,700			
Total	1,088,919	975,367	874,900			

Source: Korea Soybean Processing Association

Korea: Soybean Crushing Capacity (As of November 2006)						
Soybean Crusher Capacity (mt/day) Location						
Shin Dong Bang Corp	1,150	Inchon				
CJ Corp	1,900	Inchon				
Total	3,050					

Note: Day=24 hours processing basis for 330 days

Source: Soybean Crushing Industry

#### SECTION II. STATISTICAL TABLES OF Meals

#### Soybean Meal PS&D

# **PSD Table**

CY Imports

CY Exports

SME

CY Imp. from U.S.

CY Exp. to U.S.

Country Korea, Republic of Commodity Meal, Soybean (1000 MT)(PERCENT) 2004 Revised Estimate **UOM** Forecast Post Post Post **USDA USDA** Post Estimate Post Estimate **USDA** Post **Estimate** Official Estimate New Official **Estimate** New Official Estimate New Market Year Begin 10-2004 10-2004 10-2005 10-2005 10-2006 10-2006 MM/YYYY Crush 900 (1000 MT) 0.79179 0.791795 0.79167 0.792 0.792 0.792222 (PERCENT Extr. Rate, 999.9999 0.79179 0.792 0.79192 Beginning Stocks 200 (1000 MT) Production 713 (1000 MT) MY Imports 1800 (1000 MT) MY Imp. from U.S. 100 (1000 MT) MY Imp. from EU 0 (1000 MT) **Total Supply** 2713 (1000 MT) MY Exports 0 (1000 MT) MY Exp. to EU 0 (1000 MT) Industrial Dom. Cons. 0 (1000 MT) Food Use Dom. Cons 23 (1000 MT) Feed Waste Dom. Co 2500 (1000 MT) 2523 (1000 MT) Total Dom. Cons. **Ending Stocks** 190 (1000 MT) **Total Distribution** 2713 (1000 MT)

1800 (1000 MT)

2523 (1000 MT)

100 (1000 MT)

0 (1000 MT)

0 (1000 MT)

# **Soybean Meal Import Trade Matrix**

# **Import Trade Matrix**

**Country** Korea, Republic of **Commodit** Meal, Soybean

	,		
Time Period	Oct/Sep	Units:	1000 MT
Imports for:	2004		2005
U.S.	2	U.S.	11
Others		Others	
Brazil	911	Brazil	696
India	153	India	411
Argentina	359	Argentina	609
China	14	China	18
Total for Others		•	1734
Others not Liste	5		7
Grand Total	1444		1752

Source: Korea Customs Service (KCS)

Korea: Soybean Meal Production <sup>1/</sup> (Metric Ton)						
Month	MY 03/04	MY 04/05	MY 05/06			
October	74,166	52,007	50,275			
November	87,160	63,602	55,745			
December	87,760	60,863	49,249			
January	64,761	58,126	48,119			
February	74,277	63,673	43,386			
March	76,996	63,324	61,052			
April	71,085	62,109	56,887			
May	57,934	67,986	57,248			
June	59,835	60,931	58,940			
July	64,305	63,288	62,728			
August	56,856	67,821	62,302			
September	50,078	59,080	47,076			
Total	825,212	742,808	653,007			
Extraction Rate	75.78%	76.16%	74.64%			

Source: Korea Soybean Processing Association 1/ based on crushers' applicable extraction rate.

Korea: Feed Ingredients Use for Animal							
Items	MY 200	)4/05	MY 2005/06				
	1,000 mt	Percent	1,000 mt	Percent			
Total Grains and Grain Substitution	9,896	65.5	10,118	65.4			
- Wheat	1,153	7.6	1,440	9.3			
- Corn	6,619	43.8	6,510	42.1			
- Others	2,124	14.1	2,168	14.0			
Total Vegetable Protein	3,510	23.2	3,619	23.4			
- Soybean Meal	2,116	14.0	2,223	14.4			
- Rapeseed Meal	285	1.9	244	1.6			
- Cottonseed Meal	53	0.4	29	0.2			
- Palm Kernel Meal	343	2.3	352	2.3			
Copra Meal	397	2.6	440	2.8			
- Others	316	2.0	331	2.1			
Total Animal Protein	129	0.9	123	0.8			
- Fish meal	41	0.3	37	0.2			
-Meat & Bone Meal	19	0.1	18	0.1			
-Others	69	0.5	68	0.4			
Total Others	1,575	10.4	1,609	10.4			
TOTAL COMPOUND FEED	15,110	100	15,469	100			

Source: Korea Feed Association

Korea: Compound Feed Production (October/September, 1,000 mt)					
Animal Type	MY 2004/05	MY 2005/06			
Poultry	4,188	4,238			
Swine	5,244	5,176			
Cattle	4,812	5,096			
Others <sup>a/</sup>	815	898			
Sub. Total	15,059	15,408			
Aquaculture b/	90	103			
Milk Substitute	101	111			
Grand Total	15,250	15,622			

Source: Korea Feed Association (KFA)

a/ include ducks, pet food, rabbit, horse, sheep, deer, quail etc.

b/ on extruded pellet basis

Korea: Soybean Meal Inclusion Rate for Fish Feedstuff								
Fish Species	Feed Production 1/	Soybean Meal	Fishmeal	Others <sup>2/</sup>				
'	(1,000 mt)	(%)	(%)	(%)				
Flounder	17	5	50-55	5				
Rockfish/ Sea bream	28	10-15	40-45	5				
Shrimp	8	20-25	25-30	5				
Mullet	18	30-35	5-10	20				
Trout	5	10-15	40-45	5				
Eels	5	5	65-70	0				
Catfish	8	20-25	25-30	5-10				
Mud Fish	7	30-35	15-20	5-10				
Others	5	30-35	15-20	5-10				
Total	101							

Source: Ministry of Maritime Affairs and Fishery and CJ Corp.

<sup>1/ 2006</sup> projection

<sup>2/</sup> Corn Gluten and Single-Cell Protein

## **SECTION II. STATISTICAL TABLES OF OILS**

# Soybean Oil PS&D

# **PSD Table**

Country Korea, Republic of Commodity Oil. Sovbean

Commodity	Oil, Soybean				(1000 MT)(PERCENT)					
	2004	Revised		2005	Estimate		2006	Forecast		UOM
			Post			Post			Post	
	USDA	Post	Estimate	USDA	Post	Estimate	USDA	Post	Estimate	
	Official	Estimate	New	Official	Estimate	New	Official	Estimate	New	
Market Year Begin		10-2004	10-2004		10-2005	10-2005		10-2006	10-2006	MM/YYYY
Crush	975	975	975	960	1000	875	990	1000		(1000 MT)
Extr. Rate, 999.9999	0.17949	0.18256	0.18256	0.17813	0.18	0.18629	0.17879	0.18	0.18222	(PERCENT
Beginning Stocks	12	20	20	12	50	50	12	57	36	(1000 MT)
Production	175	178	178	171	180	163	177	180	164	(1000 MT)
MY Imports	244	244	244	265	250	265	270	250	340	(1000 MT)
MY Imp. from U.S.	0	14	14	0	0	14	0	0	0	(1000 MT)
MY Imp. from EU	0	0	0	0	0	0	0	0	0	(1000 MT)
Total Supply	431	442	442	448	480	478	459	487	540	(1000 MT)
MY Exports	4	4	4	4	5	4	4	5	5	(1000 MT)
MY Exp. to EU	0	0	0	0	0	0	0	0	0	(1000 MT)
Industrial Dom. Cons.	18	18	18	17	18	18	19	18	80	(1000 MT)
Food Use Dom. Cons.	397	370	370	415	400	420	420	410		(1000 MT)
Feed Waste Dom. Cor	0	0	0	0	0	0	0	0	0	(1000 MT)
Total Dom. Cons.	415	388	388	432	418	438	439	428	500	(1000 MT)
Ending Stocks	12	50	50	12	57	36	16	54	35	(1000 MT)
Total Distribution	431	442	442	448	480	478	459	487	540	(1000 MT)
CY Imports	0	256	256	0	250	260	0	250	340	(1000 MT)
CY Imp. from U.S.	0	17	17	0	0	14	0	0	0	(1000 MT)
CY Exports	0	4	0	0	5	4	0	5	5	(1000 MT)
CY Exp. to U.S.	0	0	0	0	0	0	0	0	0	(1000 MT)

# **Soybean Oil Import Trade Matrix**

# **Import Trade Matrix**

**Country** Korea, Republic of

<b>Commodit</b> C	il, Soybean
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Time Period	Oct/Sep	Units:	1000MT
Imports for:	2004		2005
U.S.	14	U.S.	14
Others		Others	
Argentina	202	Argentina	241
Brazil	17	Brazil	10
T / 1/ 0/	040		051
Total for Others			251
Others not Liste	11		0
Grand Total	244		265

Source: Korea Customs Service (KCS)

Korea: Soybean Oil Production (Metric Ton)					
Month	MY 03/04	MY 04/05	MY 05/06		
October	17,495	12,562	12,000		
November	20,711	16,026	13,700		
December	21,765	14,173	12,000		
January	15,156	14,097	13,000		
February	17,089	14,810	10,500		
March	17,372	14,819	13,700		
April	16,538	14,536	13,500		
May	13,423	16,208	15,400		
June	14,180	14,672	16,000		
July	15,099	15,000	15,500		
August	13,507	17,000	15,500		
September	11,959	14,000	12,500		
Total	194,294	177,903	163,300		
Extraction Rate	17.84%	18.24%	18.66%		

Source: Korea Soybean Processing Association (KSPA)